ABSTRACT OF THE DISCLOSURE

Electrophoretic system having a separation system and a detection system, where the separation system has a channel (1) and a first separation electrode (2) located at a first end of the channel (1) and a second separation electrode (3) located at the second end of the channel (1), where the separation system is arranged in such a way that a potential difference can be applied between the first and second separation electrode (2, 3), where the detection system, in use, is positioned close to the channel (1) or inside the channel (1), the system having elements to reduce a voltage difference between the separation system and the detection system in order to prevent electrical breakthrough between the separation system and the detection system.